



# **Computational Physics Student** Summer Workshop

Sponsored by the LANL Advanced Scientific Computing (ASC) Program

Los Alamos National Laboratory's X Computational Physics Division (XCP), in cooperation with other related divisions including X Theoretical Design and Computer, Computational, and Statistical Sciences, sponsors the annual Computational Physics Student Summer Workshop.



The workshop seeks to bring to the Laboratory a diverse group of exceptional undergraduate and graduate students for informative, enriching lectures and to work with its staff for 10 weeks on interesting, relevant projects that may culminate in articles or conference presentations. Students are organized into groups of 2-3 working under the guidance of one or more mentors. Each participant is awarded a fellowship that typically ranges from \$7,500 to \$13,000, based on academic rank (junior, senior, 1st year graduate student, etc.).

The 2018 workshop will be held from June 11 to August 17. Application instructions are posted on the workshop website:

## http://compphysworkshop.lanl.gov/

## The 2018 Summer Workshop will investigate the following research areas:

- Predictive Models for Brittle Damage **Evolution**
- Supernovae (Stardust)
- Catalytic Materials
- Molecules in Extremis
- Shock Reflection and Refraction
- Turbulence Evolution
- Multiphase Continuum Dynamics
- Method of Manufactured Solutions
- Large Ensemble Analysis
- **Protoplanets**
- Monte Carlo Radiation
- Interpolation of Tabular Data

See the Workshop website for detailed project descriptions

# Noteworthy survey quotes from past participants:

"This was overall one of the best experiences of my life."

"I felt the overall quality of the workshop was really excellent."



"My experiences there have completely changed the course of where I want my career to go and what I want to do with my life."

"The workshop allowed me to...choose a dissertation project which was modern, academically interesting, and scientifically useful to the computational physics community."

"I appreciated my mentor's mentoring style, where he outlined the project and gave us much leeway in figuring out how to go about it."

### Lectures, Teamwork, and Mentoring

are integrated to help you learn about computational physics and enhance your career. Shared technical goals help you build connections for the

#### **Generous Fellowships**

are awarded to support your educational and research efforts while in the summer workshop.



#### **Social Events**

tours, and weekend trips enhance the teambuilding experience, building lasting memories and professional relationships.

















<sup>\*</sup>Applications are accepted from US citizens only